

R.N.G.PATEL INSTITUTE OF TECHNOLOGY-RNGPIT
(An Autonomous Institute U/s UGC Act 1956)

B.Tech. SEMESTER-III, SEMESTER END EXAMINATION – WINTER 2025

SUBJECT CODE: 1CV303

DATE: 20-12-2025

SUBJECT NAME: BUILDING & TOWN PLANNING

TIME: 11:00 AM to 01:30 PM

TOTAL MARKS: 70

Instructions

1. It is **compulsory** for students to write **Enrolment No. /Seat No.** on the question paper.
2. Write answers of **Section A** and **Section B** in **separate answer books**.
3. Attempt all questions from both **Section A** and **Section B**.
4. Each section carries **35 marks**, with a total of **70 marks** for the examination.
5. The figures to the right of each question indicate full marks, make suitable assumptions with justification.
6. BL - Cognitive Level (As per Revised Bloom's Taxonomy) (R-Remember, U-Understanding, A –Application, N –Analyze, E – Evaluate, C -Create), CO - Course Outcomes.

SECTION A

			Marks	BL	CO
Q.1	(a) What is orientation? Discuss the factor affecting orientation.		03	U	1
	(b) Enlist various principle of planning and explain any two of them in detail.		04	A	1
Q.2	(a) Explain Principles of Architectural Composition.		03	U	3
	(b) Differentiate between Functional planning and Aesthetic planning in buildings.		04	U	3
	(c) Explain objectives, scope and applicability of building bye-laws.		07	A	3
OR					
Q.2	(a) Explain the following terms: (i) FSI (ii) Setback (iii) Margin.		03	U	3
	(b) Discuss aspect and prospect in the context of building planning.		04	U	3
	(c) Explain RERA and its importance in modern construction practices.		07	A	3
Q.3	(a) What is scale proportion in building drawings?		03	R	6
	(b) Explain the types of perspective views used in building drawings.		04	U	6
	(c) Draw ground floor and first floor plan of a two storeyed residential building on a 14 x 19 m plot area for a family of six persons as per building Bye laws and principle of planning. Assume suitable direction of north and front road. Also assume necessary data.		07	N	6

OR

Q.3	(a) Explain the following terms: (i) Ground Line (ii) Picture Plane (iii) Station Point.	03	R	6
	(b) Discuss elements of perspective and their importance in architectural representation.	04	U	6
	(c) Discuss the detail procedure for preparing <i>working drawings</i> for residential buildings.	07	A	6

SECTION B

		Marks	BL	CO
Q.4	(a) Explain the factors considered for planning earthquake resistant building.	03	A	2
	(b) Discuss the failure mechanisms of masonry building.	04	N	2
Q.5	(a) Write short notes on “ civic survey ”.	03	R	4
	(b) What is the necessity of civil surveys for town planning purpose?	04	U	4
	(c) Discuss brief history of town planning.	07	U	4

OR

Q.5	(a) Write short not on “ Preliminary Survey ”.	03	R	4
	(b) Discuss method adopt to collect data.	04	U	4
	(c) Discuss growth of towns according to direction.	07	U	4
Q.6	(a) Define “ Zone ”.	03	R	5
	(b) Write short note on neighborhood planning.	04	U	5
	(c) Briefly explain Central Business District (CBD).	07	A	5

OR

Q.6	(a) Define “ Slum ”.	03	R	5
	(b) List out various reasons of slum formation and explain any one.	04	U	5
	(c) List out various requirements of smart city and explain any two.	07	A	5
